

WHAT IS CLAIMED IS:

1. An optical disk apparatus which records information regarding copyright on a disk-shaped storage medium by emission of laser beam, said optical disk apparatus comprising:

a plurality of binary sequence generating means for generating binary sequences corresponding to the number of bits of said information regarding copyright, at a transmission rate which is faster than that of said information regarding copyright;

a plurality of operation means for operating said binary sequences with corresponding bits of said information regarding copyright and outputting a plurality of operation results;

selection means for outputting a drive signal by selectively outputting, according to a predetermined switching signal, said plurality of operation results; and

modulation means for modulating said laser beam in accordance with said drive signal.

2. An optical disk apparatus according to Claim 1, wherein said binary sequences are M-sequences.

3. An optical disk apparatus according to Claim 1,

wherein a synchronization pattern is inserted in said drive signal at a predetermined cycle.

4. An optical disk apparatus according to Claim 3, wherein said plurality of binary sequence generating means repeatedly output said binary sequences with reference to said synchronization pattern.

5. An optical disk apparatus according to Claim 1, wherein said information regarding copyright is recorded in the form of a pit sequence by the emission of said laser beam.

6. An optical disk apparatus according to Claim 1, wherein said plurality of binary sequence generating means repeatedly generate the same binary sequences at the cycle of rotation of said disk-shaped storage medium, at least for a predetermined region of said disk-shaped storage medium;

wherein said plurality of operation means repeatedly multiply the same information regarding copyright with said binary sequences to output said plurality of operation results, at least for said predetermined region; and

wherein said selection means selectively output said plurality of operation results so as to form different

patterns for the repetition of said binary sequences and/or the repetition of the same information regarding copyright, at least for said predetermined region.

7. An optical disk apparatus according to Claim 1, wherein said switching signal is a random number signal.

8. A method of recording on an optical disk, in which information regarding copyright is recorded on a disk-shaped storage medium by emission of laser beam, the method comprising the steps of:

generating plural lines of signals by respectively scrambling bit sequences of said information regarding copyright with different binary sequences having a transmission rate which is faster than that of said information regarding copyright;

scrambling said plural lines of signals to generate a single line of drive signal; and

modulating said laser beam in accordance with said single line of drive signal.

9. An optical disk on which information regarding copyright is recorded, wherein each bit of said information regarding copyright is recorded while being distributed in the circumferential direction of an information recording

surface of said optical disk.

10. An optical disk according to Claim 9,
wherein said information regarding copyright is
recorded by emission of laser beam which is modulated in
accordance with a predetermined drive signal;
wherein said drive signal is a single line of signal
which is generated by scrambling a plural lines of operation
signals; and
wherein said plural lines of signals are generated by
respectively scrambling bit sequences of said information
regarding copyright using different binary sequences having
a transmission rate which is faster than that of said
information regarding copyright.

11. An optical disk according to Claim 10, wherein
said binary sequences are M-sequences.

12. An optical disk according to Claim 10, wherein
information relating to said information regarding copyright
is recorded in the form of radially extending bar codes.

13. An optical disk according to Claim 12, wherein the
information relating to said information regarding copyright
is unique to each optical disk.

14. An optical disk according to Claim 12, wherein the information relating to said information regarding copyright is recorded in a region where said information regarding copyright is recorded.

15. An optical disk apparatus, in which encryption processing is performed using information regarding copyright which is recorded on an optical disk, said optical disk apparatus comprising:

 playback signal generating means for emitting laser beam on said optical disk, receiving returning light, and generating a playback signal in accordance with the returning light;

 binary sequence generating means for generating a plurality of binary sequences with reference to a synchronization pattern of said playback signal;

 a plurality of sampling means for sampling said playback signal with reference respectively to said binary sequences to thereby output a plurality of sampling results;

 a plurality of integration means for respectively integrating said plurality of sampling results to thereby output a plurality of integration results; and

 determination means for respectively determining said integration results and decoding corresponding bit sequences

of said information regarding copyright.

16. An optical disk apparatus according to Claim 15, wherein said binary sequences are M-sequences.

17. An optical disk apparatus according to Claim 15, wherein data recorded on said optical disk is decrypted using said information regarding copyright.

18. An optical disk apparatus according to Claim 15, wherein desired data is encrypted and recorded on said optical disk using said information regarding copyright.